

BRUHAT BANGALORE MAHANAGARA PALIKE

YALAHANKA ZONE

Name of Work:-Detailed Estimate for Providing Energy efficient LED Street Lights, control Switches and wires around Ward No 04.

Budget Head

Division No.....

Estimate No.

For Rs.

2500000.00

Sl. No.	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
1	pwd sr 14-15 Datta Rate	Providing Rcc Pole pedestal of Size 0.5x0.5x1.6 Mtrs Including digging of pit, tor steel, anchoring bolts nuts ,templates ,Centring,1;4;8base concrete,1;2;4pedestal concrete and etc coplete as per the data sheet enclosed	Nos	153	3000.00	459000.00
2	16/4.7.2	Supplying, and fixing of Hot dip Galvanized M.S Bracket suitable for out door luminaries and mounted on Octagonal pole using necessary bolts, nuts etc., complete.Single Arm Bracket with 1500mm Standard 40/50MM dia	Nos	8	2112.00	16896.00
3	6/2.3.3	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper wire with low conductor resistance single core in open or concealed system of wiring with specified IS-694:confirming to latest amendments.2.5sqmm	Mtrs	100	32.00	3200.00
4	2/1.1.2	Supplying heavy gauge PVC conduit pipe dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.32mm dia 2mm thick	Mtrs	248	65.00	16120.00
5	40/6.4.4	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm	Mtrs	5200	150.00	780000.00
6	40/6.4.6	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 3.5 core 35 sqmm	Mtrs	445	225.00	100125.00
7	41/6.5.1	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required In existing trench/duct.6 sqmm to 16 sqmm	Mtrs	5200	11.88	61776.00
8	41/6.5.2	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required In existing trench/duct 25 sqmm to 75 sqmm	Mtrs	445	15.50	6897.50
9	41/6.6.1	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete (As per Civil SR KSRB I-2, P-7)In soil (ordinary)	Mtrs	4850	76.00	368600.00

10	6.9.1	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.40mm	Mtrs	20	335.00	6700.00
11	42/6.1.4	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.35Sqmm	Nos	3	350.00	1050.00
12	40/6.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 12 mm dia	No	2	2999.70	5999.40
13	40/6.3.1	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required.25x3mm GI strip	Mtrs	6	75.00	450.00
14	5.14	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics)100Amps 25kA.	Nos	2	4530.00	9060.00
15	30/5.42.2	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 7 tanks treatment with powder coated paint and finally finished with approved colour etc., complete.16SWG	Sqcms	60000	0.35	21000.00
16	5.41.1	Supplying and fixing angle iron frame work fabricated out of M.S. angle iron.. and M.S. flat ... with bolts, washers etc., and painted with 2 coats of red oxide and then two coats of approved paint.40x40x6mm	Mtrs	21	255.00	5355.00
17	14/4.3	Supply and erection of 14 Feet Height Street Light Pole on suitable cement concrete foundation with 2.5 Feet height dia 95 mm cast iron decorative round pedestal as per design weighing not less than 37Kgs, the pedestal shall be fitted with Class 'C' G.I.Pipe 7 Feet height 75mm outer dia and 7 feet height top piece outer dia of 65mm fixed by measure of threading/ welding / coupling complete. (excluding foundation).	Each	8.00	14080.00	112640.00
18	26/4.34.2	LED Post Top Lantern GARDEN. Supply of LED Post Top Lantern with system ... wattage, housing & frame shall be of powder coated, die cast aluminum, diffuser with high density polyethylene IP65 EPDM Gasket. Life 50000 Hrs. @ L70 shall be conforming to IS 10322/Part 5/ Section 5 @ 230V. 5 years Warranty against any manufacturing defect working under standard electrical condition LED Post Top Lantern with 24 watts	Nos	8	15930.00	127440.00
						1974868.90

19	2/1.1.2	Supplying heavy gauge PVC conduit pipe dia mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.25mm dia 2mm thick	Mtrs	45	65.00	2925 00
20	BESCO M SR15/49 02	1.1KV Class HR (Heat Resistant) PVC Insulated & UnSheathed Aluminium Wires Multistrand Single core Lead wires as per IS-694: 2010PVC Wire - 25 Sqmm AI Wt: 6.7 Kgs, Total Wt: 11.5Kgs for 100Mtrs	Mtrs	90	32.31	2907 90
21	AR	Thiristor based single/ Three phase smart street light control and monitoring system Remotely control and and monitorable smart street light system by using web or mobile application .smart control system has hardware ruggedness over field issues like line cross, line short, lighting and any other irregularities in voltage. It has some features like 1.Remote lighting management.2.Precise lighting turnoff.3.Load ballancing.4.Load power regulation.5.Status tracking. It works on the basis of some of these features 1) Main Control Unit (Mother board) : Handles controlling , data handling and other communication process. 2) Communication unit: GSM/GPRS quad bandwidth RS232 interface wireless communication unit 3) Gate Driver Unit: Firing angle controllable board for driving the thyristor 4) Switching Thyristor: SCR 110 AMPS dual thyristor modules for switching 5) Embedded Firmware: Firmware to control , handle , process the data and communicate it wirelessly.6) Metal Enclosure : IP66 weather proof metal enclosure.7) Transformers: Customized step down transformers for various purposes.8) Wiring and other device assembly components.	Nos	3	51500 00	154500 00
		Total Rs				2262641.80
		GST Charges (12% on SR Electrical items) Item No 1 to 17				236984.27
		Mislenious				373.93
		Grand Total Rs				2500000.00

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD(Elec) SR of 2014-15 & 2019-20, BESCOM SR 2018-19 and Approved Rates

[Signature]
Asst. Engineer (Elec)

[Signature]
Asst. Exe. Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

[Signature]
EXECUTIVE ENGINEER (ELEC)
YALAHANKA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Approval

Accorded For *Rs. 25 lakhs only*
Head of A/C. *P.0190*
CER NO : *04* Dt: *28.07.2021*

[Signature]
TA

[Signature]
CE (YNO)

Technical Sanction

Accorded For *Rs. 25 lakhs only*
Head of A/C. *P.0190*
CER NO : *18* Dt: *28.07.2021*

[Signature]
TA

[Signature]
CE (YNO)